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IT IS CLAIMED:

- 1. An isolated polynucleotide comprising a nucleic acid sequence which encodes or is complementary to a sequence which encodes a *MTP* polypeptide having at least 80% sequence identity to the amino acid sequence presented as SEQ ID NO:2 or SEQ ID NO:4.
- 2. A plant transformation vector comprising the isolated polynucleotide of claim 1.
- 3. A transgenic plant cell comprising the vector of claim 2.

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- 4. A method of modifying anthocyanin content in a plant comprising introducing into progenitor cells of the plant, a plant transformation vector according to claim 2 and growing the transformed progenitor cells to produce a transgenic plant wherein said polynucleotide sequence is expressed and said transgenic plant exhibits increased anthocyanin content relative to the same type of plant which has not been so transformed.
- 5. A transgenic plant comprising a plant transformation vector comprising a nucleotide sequence that encodes or is complementary to a sequence that encodes an MTP polypeptide, whereby the transgenic plant has increased anthocyanin content relative to control plants.
- 6. The transgenic plant of claim 5 wherein the nucleotide sequence encodes MTP77.
- 7. The transgenic plant of claim 5 wherein the nucleotide sequence encodes MTP96.

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8. A method of producing anthocyanin comprising extracting anthocyanin from a transgenic plant of any one of claims 5-7.